

Figure 1A

Fig 1B

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1   CTCGAGAAAT CATAAAAAAT TTATTTGCTT TGTGAGCGGA TAACAATTAT AATAGATTCA
61  ATTGTGAGCG GATAACAATT TCACACAGAA TTCATTAAAG AGGAGAAAT AACTATGGCA
121 CTTAGTGGGA TCCGCATGCG AGCTCGGTAC CCCGGGGGTG GCAGCGGTTT TGGCGCAGCA
181 GCGGAAATCA GTGGTCACAT CGTACGTTCC CCGATGGTTG GTACTTTCTA CCGCACCCCA
241 AGCCCGGACG CAAAAGCGTT CATCGAAGTG GGTCAGAAAG TCAACGTGGG CGATACCCTG
301 TGCATCGTTG AAGCCATGAA AATGATGAAC CAGATCGAAG CGGACAAATC CGGTACCCTG
361 AAAGCAATTG TGGTCGAAAG TGGACAACCG GTAGAATTTG ACGAGCCGCT GGTTCGTATC
421 GAGGGTGGCA GCGGTTCTGG CCACCATCAC CATCACCATA AGCTTAATTA GCTGAGCTTG
481 GACTCCTGTT GATAGATCCA GTAATGACCT CAGAACTCCA TCTGGATTG TTCAGAACGC
541 TCGGTTGCCG CCGGGCGTTT TTTATTGGTG AGAATCCAAG CTAGCTTGCG GAGATTTTCA
601 GGAGCTAAGG AAGCTAAAAT GGAGAAAAA ATCACTGGAT ATACCACCGT TGATATATCC
661 CAATGGCATC GTAAAGAACA TTTGAGGCA TTTCACTCAG TTGCTCAATG TACCTATAAC
721 CAGACCGTTC AGCTGGATAT TACGGCCTTT TTAAGACCG TAAAGAAAAA TAAGCACAAG
781 TTTTATCCGG CCTTTATTCA CATTCCTGCC CGCCTGATGA ATGCTCATCC GGAATTTCTG
841 ATGGCAATGA AAGACGGTGA GCTGGTGATA TGGGATAGTG TTCACCCTG TTACACCCTT
901 TTCCATGAGC AAAGTGAAC GTTTTCATCG CTCTGGAGTG AATACCACGA CGATTTCCCG
961 CAGTTTCTAC ACATATATTC GCAAGATGTG GCGTGTACG GTGAAAACCT GGCCTATTTT
1021 CCTAAAGGGT TTATTGAGAA TATGTTTTTC GTCTCAGCCA ATCCCTGGGT GAGTTTCACC
1081 AGTTTTGATT TAAACGTGGC CAATATGGAC AACTTCTTCG CCCCCGTTTT CACCATGGGC
1141 AAATATTATA CGCAAGGCGA CAAGGTGCTG ATGCCGCTGG CGATTTCAGT TCATCATGCC
1201 GTTTGTGATG GCTTCCATGT CGGCAGAATG CTTAATGAAT TACAACAGTA CTGCGATGAG
1261 TGGCAGGGCG GGCCTAATTT TTTTAAAGG AGTTATGGT GCCCTTAAAC CCCTGGGGTA
1321 ATGACTCTCT AGCTTGAGGC ATCAAATAAA ACGAAAGGCT CAGTCGAAAG ACTGGGCTTT
1381 TCGTTTTATC TGTTGTTTGT CCGTGAACGC TCTCCTGAGT AGGACAAATC CGCCCTCTAG
1441 ATTACGTGCA GTCGATGATA AGCTGTCAAA CATGAGAATT GTGCCTAATG AGTGAGCTAA
1501 CTACATTAAT TTGCGTTGCG CTCCTGCCC GCTTTCAGT CGGGAAACCT GTCGTGCCAG
1561 CTGCATTAAT GAATCGGCCA ACGCGCGGGG AGAGGCGGTT TGCGTATTGG GTCGGCAGGT
1621 GGTTTTTCTT TTCACCAGTG AGACGGGCAA CAGCTGATTG CCCTTCACCG CCTGGCCCTG
1681 AGAGAGTTGC AGCAAGCGGT CCACGCTGGT TTGCCCCAGC AGGCGAAAAT CCTGTTTGAT
1741 GGTGGTTAAC GCGGGGATAT AACATGAGCT GTCTTCGTA TCGTCGTATC CCACTACCGA
1801 GATATCCGCA CCAACGCGCA GCCCGGACTC GGTAATGGCG CGCATTCGCG CCAGCGCCAT
1861 CTGATCGTTG GCAACCAGCA TCGCAGTGGG AACGATGCC TCATTACGTA TTTGCTAGGT
1921 TTGTTGAAAA CCGGACATGG CACTCCAGTC GCCTTCCCGT TCCGCTATCG GCTGAATTTG
1981 ATTGCGAGTG AGATATTTAT GCCAGCCAGC CAGACGCAGA CGCGCCGAGA CAGAACTTAA
2041 TGGGCCCCGT AACAGCGCGA TTTGCTGGTG ACCCAATGCG ACCAGATGCT CCACGCCCCG
2101 TCGCGTACCG TCTTCATGGG AGAAAATAAT ACTGTTGATG GGTGTCTGGT CAGAGACATC
2161 AAGAAATAAC GCCGGAACAT TAGTGCAGGC AGCTTCCACA GCAATGGCAT CTGTGTCATC
2221 CAGCGGATAG TTAATGATCA GCCCACTGAC GCGTTGCGCG AGAAGATTGT GCACCGCCGC
2281 TTTACAGGCT TCGACGCCGC TTCGTTCTAC CATCGACACC ACCACGCTGG CACCCAGTTG
2341 ATCGGCGCGA GATTTAATCG CCGCGACAAT TTGCGACGGC GCGTGCAGGG CCAGACTGGA
2401 GGTGGCAACG CCAATCAGCA ACGACTGTTT GCCCGCCAGT TGTTGTGCCA CGCGGTTGGG
2461 AATGTAATTC AGCTCCGCCA TCGCCGCTTC CACTTTTTCG CGCGTTTTCG CAGAAACGTG
2521 GCTGGCCTGG TTCACCACGC GGGAAACGGT CTGATAAGAG ACACCGGCAT ACTCTGCGAC
2581 ATCGTATAAC GTTACTGGTT TCACATTAC CACCCTGAAT TGACTCTCTT CCGGGCGCTA
2641 TCATGCCATA CCGCGAAAGG TTTTGACCA TTGATGGTG TCGGAATTTT GGGCAGCGTT
2701 GGTGCTGGC CACGGGTGCG CATGACTAG AGCTGCCTCG CGCGTTTCGG TGATGACGGT
2761 GAAAACCTCT GACACATGCA GCTCCCGGAG ACGGTCACAG CTTGTCTGTA AGCGGATGCC
2821 GGGAGCAGAC AAGCCCGTCA GGGCGCGTCA GCGGGTGTG GCGGGTGTG GGGCGCAGCC
2881 ATGACCCAGT CACGTAGCGA TAGCGGAGTG TATACTGGCT TAAGTATGCG GCATCAGAGC
2941 AGATTGTACT GAGAGTGCAT CATATGCGGT GTGAAATACC GCACAGATGC GTAAGGAGAA
3001 AATACGCGAT CAGGCGCTCT TCCGCTCTCT CGCTCACTGA CTCGCTGCGC TCGGTCGTTT
3061 GGCTGCGGCG AGCGGTATCA GCTCACTCAA AGGCGGTAAT ACGGTTATCC ACAGAATCAG
3121 GGGATAACGC AGGAAAGAAC ATGTGAGCAA AAGGCCAGCA AAAGGCCAGG AACCCTAAAA
3181 AGGCCGCGTT GCTGGCGTTT TTCCATAGGC TCCGCCCCC TGACGAGCAT CACAAAAATC
3241 GACGCTCAAG TCAGAGGTGG CGAAACCGCA CAGGACTATA AAGATACCGA GCGTTTCCCC
3301 CTGGAAGCTC CCTCGTGCGC TCTCCTGTTT CGACCCGCGC GCTTACCGGA TACCTGTCCG
3361 CCTTTCTCCC TTCGGGAAGC GTGGCGCTTT CTCATAGCTC ACGCTGTAGG TATCTCAGTT
3421 CGGTGTAGGT CGTTCGCTCC AAGCTGGGCT GTGTGCACGA ACCCCCCGTT CAGCCCGACC
3481 GCTGCGCCTT ATCCGGTAAC TATCGTCTTG AGTCCAACCC GGTAAGACAC GACTTATCGC
3541 CACTGGCAGC AGCCACTGGT AACAGGATTA GCAGAGCGAG GTATGTAGGC GGTGCTACAG
3601 AGTTCTTGAA GTGGTGGCCT AACTACGGCT ACACTAGAAG GACAGTATTT GGTATCTGCG
3661 CTCTGCTGAA GCCAGTTACC TTCGGAAAAA GAGTTGGTAG CTCTTGATCC GGCAACAAAA
3721 CCACCGCTGG TAGCGGTGGT TTTTGTGTTT GCAAGCAGCA GATTACGCGC AGAAAAAAG
3781 GATCTCAAGA AGATCCTTTG ATCTTTTCTA CGGGGTCTGA CGCTCAGTGG AACGAAAACT
3841 CACGTTAAGG GATTTTGGTC ATGAGATTAT CAAAAAGGAT CTTCACCTAG ATCCTTTTAA
3901 ATTAAAAATG AAGTTTAAAA TCAATCTAAA GTATATATGA GTAAACTTGG TCTGACAGTT

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3961 ACCAATGCTT AATCAGTGAG GCACCTATCT CAGCGATCTG TCTATTTCTG TCATCCATAG
4021 TTGCCTGACT CCCCCTCGTG TAGATAACTA CGATACGGGA GGGCTTACCA TCTGGCCCCA
4081 GTGCTGCAAT GATACGCGA GACCCACGCT CACCGGCTCC AGATTTATCA GCAATAAACC
4141 AGCCAGCCGG AAGGGCCGAG CGCAGAAGTG GTCCTGCAAC TTTATCCGCC TCCATCCAGT
4201 CTATTAATTG TTGCCGGGAA GCTAGAGTAA GTAGTTCGCC AGTTAATAGT TTGCGCAACG
4261 TTGTTGCCAT TGCTACAGGC ATCGTGGTGT CACGCTCGTC GTTTGGTATG GCTTCATTCA
4321 GCTCCGGTTC CCAACGATCA AGGCGAGTTA CATGATCCCC CATGTTGTGC AAAAAAGCGG
4381 TTAGCTCCTT CGGTCCTCCG ATCGTTGTCA GAAGTAAGTT GGCCGCAGTG TTATCACTCA
4441 TGGTTATGGC AGCACTGCAT AATTCTCTTA CTGTCATGCC ATCCGTAAGA TGCTTTTCTG
4501 TGA CTGGTGA GTACTCAACC AAGTCATTCT GAGAATAGTG TATGCGGCGA CCGAGTTGCT
4561 CTTGCCCCGGC GTCAATACGG GATAATACCG CGCCACATAG CAGAACTTTA AAAGTGCTCA
4621 TCATTGGAAA ACGTTCTTCG GGGCGAAAAC TCTCAAGGAT CTTACCGCTG TTGAGATCCA
4681 GTTCGATGTA ACCCACTCGT GCACCCAAC TATCTTCAGC ATCTTTTACT TTCACCAGCG
4741 TTTCTGGGTG AGCAAAAACA GGAAGGCAAA ATGCCGAAA AAAGGGAATA AGGGCGACAC
4801 GGAAATGTTG AATACTCATA CTCTTCCTTT TTCAATATTA TTGAAGCATT TATCAGGGTT
4861 ATTGTCTCAT GAGCGGATAC ATATTTGAAT GTATTTAGAA AAATAAACAA ATAGGGGTTC
4921 CGCGCACATT TCCCCGAAA GTGCCACCTG ACGTCTAAGA AACCATTATT ATCATGACAT
4981 TAACCTATAA AAATAGGCGT ATCACGAGGC CCTTTCGTCT TCAC

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Figure 1B

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          Dra III          Sph I          Sma I
115 ATGGCA CTTAGTGGGA TCCGCATGCG AGCTCGGTAC CCCGGGGGTG GCAGC
    TACCGT GAATCACCTT AGGCGTACGC TCGAGCCATG GGGCCCCCAC CGTCG

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Figure 1C

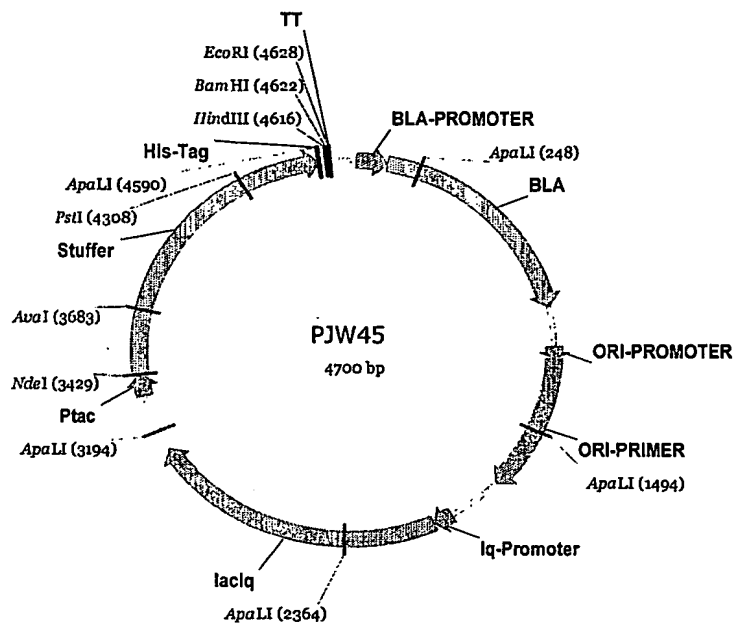
**Figure 2A**

Fig 2B

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1  CAGGTGGCAC TTTTCGGGGA AATGTGCGCG GAACCCCTAT TTGTTTATTT TTCTAAATAC
61 ATTCAAATAT GTATCCGCTC ATGAGACAAT AACCTGATA AATGCTCAA TAATATTGAA
121 AAAGGAAGAG TATGAGTATT CAACATTTCG GTGTCGCCCT TATTCCTTTT TTTGCGGCAT
181 TTTGCCTTCC TGTTTTTGCT CACCCAGAAA CGCTGGTGAA AGTAAAAGAT GCTGAAGATC
241 AGTTGGGTGC ACGAGTGGGT TACATCGAAC TGGATCTCAA CAGCGGTAAG ATCCTTGAGA
301 GTTTTCGCCC CGAAGAACGT TTTCCAATGA TGAGCACTTT TAAAGTTCTG CTATGTGGCG
361 CGGTATTATC CCGTATTGAC GCCGGGCAAG AGCAACTCGG TCGCCGCATA CACTATTCTC
421 AGAATGACTT GGTGAGTAC TCACCACTCA CAGAAAAGCA TCTTACGGAT GGCATGACAG
481 TAAGAGAATT ATGCAGTGCT GCCATAACCA TGAGTGATAA CACTGCGGCC AACTTACTTC
541 TGACAACGAT CGGAGGACCG AAGGAGCTAA CCGCTTTTTT GCACAACATG GGGGATCATG
601 TAACTCGCCT TGATCGTTGG GAACCGGAGC TGAATGAAGC CATAACAAAC GACGAGCGTG
661 ACACCACGAT GCCTGTAGCA ATGGCAACAA CGTTGCGCAA ACTATTAAC TGGGAACTAC
721 TTAGTCTAGC TTCCCGGCAA CAATTAATAG ACTGGATGGA GCGGATAAAA GTTGCAGGAC
781 CACTTCTGCG CTCGGCCCTT CCGGCTGGCT GGTTTATTGC TGATAAATCT GGAGCCGGTG
841 AGCGTGGGTC TCGCGGTATC ATTGCAGCAC TGGGGCCAGA TGGTAAGCCC TCCCGTATCG
901 TAGTTATCTA CACGACGGGG AGTCAGGCAA CTATGGATGA ACGAAATAGA CAGATCGCTG
961 AGATAGGTGC CTCCTGATT AAGCATTTGT AACTGTCAGA CCAAGTTTAC TCATATATAC
1021 TTTAGATTGA TTTAAACTT CATTTTAAAT TTAAGGAT CTAGGTGAAG ATCCTTTTTG
1081 ATAATCTCAT GACCAAAATC CTTAACGTG AGTTTTCGTT CCACTGAGCG TCAGACCCCG
1141 TAGAAAAGAT CAAAGGATCT TCTTGAGATC CTTTTTTTCT GCGCGTAATC TGCTGCTTGC
1201 AAACAAAAAA ACCACCGCTA CCAGCGGTGG TTTGTTTGCC GGATCAAGAG CTACCAACTC
1261 TTTTCCGAA GGTAACGGC TTCAGCAGAG CGCAGATACC AAATACTGTC CTCTAGTGT
1321 AGCCGTAGTT AGGCCACCAC TTCAAGAACT CTGTAGCACC GCCTACATAC CTCGCTCTGC
1381 TAATCCTGTT ACCAGTGGCT GCTGCCAGTG GCGATAAGTC GTGTCTTACC GGGTTGGACT
1441 CAAGACGATA GTTACCGGAT AAGGCGCAGC GGTGCGGCTG AACGGGGGGT TCGTGCACAC
1501 AGCCAGCTT GGAGCGAACG ACCTACACCG AACTGAGATA CCTACAGCGT GAGCATTGAG
1561 AAAGCGCCAC GCTTCCCGAA GGGAGAAAGG CGGACAGGTA TCCGGTAAGC GGCAGGGTCG
1621 GAACAGGAGA GCGCACGAGG GAGCTTCCAG GGGGAAACGC CTGGTATCTT TATAGTCCTG
1681 TCGGGTTTCG CCACCTCTGA CTTGAGCGTC GATTTTTGTG ATGCTCGTCA GGGGGGCGGA
1741 GCCTATGGAA AAACGCCAGC AACGCGGCCT TTTTACGGTT CCTGGCCTTT TGCTGGCCTT
1801 TTGCTCACAT GTTCTTTCCT GCGTTATCCC CTGATTCTGT GGATAACCGT ATTACCGCTT
1861 TTGAGTGAGC TGATACCGCT CGCCGAGGCC GAACGACCGA GCGCAGCGAG TCAGTGAGCG
1921 AGGAAGCCCA GGACCCAACG CTGCCCAGAA TTCCGACACC ATCGAATGGT GCAAAACCTT
1981 TCGCGGTATG GCATGATAGC GCCCGGAAGA GAGTCAATTC AGGGTGGTGA ATGTGAAACC
2041 AGTAACGTTA TACGATGTG CAGAGTATGC CGGTGTCTCT TATCAGACCG TTTCCCGCGT
2101 GGTGAACCAG GCCAGCCACG TTTCTGCGAA AACGCGGGAA AAAGTGGAAG CGGCGATGGC
2161 GGAGCTGAAT TACATTCCCA ACCGCGTGGC ACAACAAC TGCGGGCAAAC AGTCGTTGCT
2221 GATTGGCGTT GCCACCTCCA GTCTGGCCCT GCACGCGCCG TCGCAAATTG TCGCGCGCAT
2281 TAAATCTCGC GCCGATCAAC TGGGTGCCAG CGTGGTGGTG TCGATGGTAG AACGAAGCGG
2341 CGTCGAAGCC TGTAAGCGG CGGTGCACAA TCTTCTCGCG CAACGCGTCA GTGGGCTGAT
2401 CATTAACAT CCGCTGGATG ACCAGGATGC CATTGCTGTG GAAGCTGCCT GCACTAATGT
2461 TCCGGCGTTA TTTCTTGATG TCTCTGACCA GACACCCATC AACAGTATTA TTTTCTCCCA
2521 TGAAGACGGT ACGCGACTGG GCGTGGAGCA TCTGGTCGCA TTGGGTCACC AGCAAATCGC

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2581 GCTGTTAGCG GGCCCATTA GTTCTGTCTC GCGCGTCTG CGTCTGGCTG GCTGGCATAA
2641 ATATCTCACT CGCAATCAAA TTCAGCCGAT AGCGGAACGG GAAGGCGACT GGAGTGCCAT
2701 GTCCGGTTTT CAACAAACCA TGCAAATGCT GAATGAGGGC ATCGTTCCCA CTGCGATGCT
2761 GGTTGCCAAC GATCAGATGG CGCTGGGCGC AATGCGCGCC ATTACCGAGT CCGGGCTGCG
2821 CGTTGGTGCG GATATCTCGG TAGTGGGATA CGACGATACC GAAGACAGCT CATGTTATAT
2881 CCCGCCGTTA ACCACCATCA AACAGGATTT TCGCCTGCTG GGGCAAACCA GCGTGGACCG
2941 CTTGCTGCAA CTCTCTCAGG GCCAGGCGGT GAAGGGCAAT CAGCTGTTGC CCGTCTCACT
3001 GGTGAAAAGA AAAACCACCC TGGCGCCCAA TACGCAAACC GCCTCTCCCC GCGCGTTGGC
3061 CGATTCATTA ATGCAGCTGG CACGACAGGT TTCCCGACTG GAAAGCGGGC AGTGAGCGCA
3121 ACGCAATTAA TGTGAGTTAG CTCACTCATT AGGCACAATT CTCATGTTTG ACAGCTTATC
3181 ATCGACTGCA CCGTGACCA ATGCTTCTGG CGTCAGGCAG CCATCGGAAG CTGTGGTATG
3241 GCTGTGCAGG TCGTAAATCA CTGCATAATT CGTGTGCTC AAGGCGCACT CCCGTTCTGG
3301 ATAATGTTTT TTGCGCCGAC ATCATAACGG TTCTGGCAA TATTCTGAAA TGAGCTGTTG
3361 ACAATTAATC ATCGGCTCGT ATAATGTGTG GAATTGTGAG CGGATAACAA TTTCACACAG
3421 GAAACACATA TGAACGACTT TCATCGCGAT ACGTGGGCGG AAGTGGATTT GGACGCCATT
3481 TACGACAATG TGGCGAATTT GCGCCGTTTG CTGCCGGACG ACACGCACAT TATGGCGGTC
3541 GTGAAGCGCA ACGCCTATGG ACATGGGGAT GTGCAGGTGG CAAGGACAGC GCTCGAAGCG
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3661 ATCGAAGCGC CGATTCTAGT TCTCGGGGCT TCCCGTCCAG CTGATGCGGC GCTGGCCGCC
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3901 TTTGTGCTTG AAGGGGCGTA CACGCATTTT GCGACTGCGG ATGAGGTGAA CACCGATTAT
3961 TTTTCCTATC AGTATACCCG TTTTTCGCAC ATGCTCGAAT GGCTGCCGTC GCGCCCGCCG
4021 CTCGTCCATT GCGCCAACAG CGCAGCGTCG CTCCGTTTCC CTGACCGGAC GTTCAATATG
4081 GTCCGCTTCG GCATTGCCAT GTATGGGCTT GCGCCGTCGC CCGGCATCAA GCCGCTGCTG
4141 CCGTATCCAT TAAAGAAGC ATTTTCGCTC CATAGCCGCC TCGTACACGT CAAAAAACTG
4201 CAACCAGGCG AAAAGGTGAG CTATGGTGCG ACGTACACTG CGCAGACGGA GGAGTGGATC
4261 GGGACGATTC CGATCGGCTA TGCGGACGGC TGGCTCCGCC GCCTGCAGCA CTTTCATGTC
4321 CTTGTTGACG GACAAAAGGC GCCGATTGTC GGCCGCATTT GCATGGACCA GTGCATGATC
4381 CGCCTGCCTG GGCCGCTGCC GGTCGGCACG AAGGTGACAC TGATTGGTCG CCAGGGGGAC
4441 GAGGTAATTT CCATTGATGA TGTGCTCGC CATTGTGAAA CGATCAACTA CGAAGTGCCT
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4561 AGAAACGCCA TTGGCCGCGG GGAAAGCAGT GCACATCACC ATCACCATCA CTAAGAGCTT
4621 GGATCCGAAT TCAGCCCGCC TAATGAGCGG GCTTTTTTTT GAACAAAATT AGCTTGCGTG
4681 TTTTGGCGGA TGAGAGAAGA

```

Figure 2B

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1   ATGGCTCTCA TCCCAGACTT GGCCATGGAA ACCTGGCTTC TCCTGGCTGT
CAGCCTGGTG
61  CTCCTCTATC TATATGGAAC CCATTACATC GGACTTTTTTA AGAAGCTTGG
AATTCAGGG
121 CCCACACCTC TGCCTTTTTT GGGAAATATT TTGTCCTACC ATAAGGGCTT
TTGTATGTTT
181 GACATGGAAT GTCATAAAAA GTATGGAAAA GTGTGGGGCT TTTATGATGG
TCAACAGCCT
241 GTGCTGGCTA TCACAGATCC TGACATGATC AAAACAGTGC TAGTGAAAGA
ATGTTATTCT
301 GTCTTCACAA ACCGGAGGCC TTTTGGGTCCA GTGGGATTTA TGAAAAGTGC
CATCTCTATA
361 GCTGAGGATG AAGAATGGAA GAGATTACGA TCATTGCTGT CTCCAACCTT
CACCAGTGGG
421 AAATCAAGG AGATGGTCCC TATCATTGCC CAGTATGGAG ATGTGTTGGT
GAGAAATCTG
481 AGGCGGGAAG CAGAGACAGG CAAGCCTGTC ACCTTGAAAG ACGTCTTTGG
GGCCTACAGC
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CAATCCACAA
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TCCATTCTTT
661 CTCTCAATAA CAGTCTTTCC ATTCCTCATC CCAATTCTTG AAGTATTAAA
TATCTGTGTG
721 TTTCCAAGAG AAGTTACAAA TTTTTAAGA AAATCTGTAA AAAGGATGAA
AGAAAGTCGC
781 CTCGAAGATA CACAAAAGCA CCGAGTGGAT TTCCTTCAGC TGATGATTGA
CTCTCAGAAT
841 TCAAAAGAAA CTGAGTCCCA CAAAGCTCTG TCCGATCTGG AGCTCGTGGC
CCAATCAATT
901 ATCTTTATTT TTGCTGGCTA TGAAACCACG AGCAGTGTTT TCTCCTTCAT
TATGTATGAA
961 CTGGCCACTC ACCCTGATGT CCAGCAGAAA CTGCAGGAGG AAATTGATGC
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CATGGTGGTG
1081 AATGAAACGC TCAGATTATT CCCAATTGCT ATGAGACTTG AGAGGGTCTG
CAAAAAAGAT
1141 GTTGAGATCA ATGGGATGTT CATTCCCCAA GGGGTGGTGG TGATGATTCC
AAGCTATGCT
1201 CTTACCCGTG ACCCAAAGTA CTGGACAGAG CCTGAGAAGT TCCTCCCTGA
AAGATTCAGC
1261 AAGAAGAACA AGGACAACAT AGATCCTTAC ATATACACAC CCTTTGGAAG
TGGACCCAGA
1321 AACTGCATTG GCATGAGGTT TGCTCTCATG AACATGAAAC TTGCTCTAAT
CAGAGTCCTT
1381 CAGAACTTCT CTTCAAACC TTGTAAAGAA ACACAGATCC CCCTGAAATT
AAGCTTAGGA
1441 GGACTTCTTC AACCAGAAAA ACCCGTTGTT CTAAAGGTTG AGTCAAGGGA
TGGCACCGTA
1501 AGTGGAGCCT GA

```

Figure 3A

1 MALIPDLAME TWLLLAIVSLV LLYLYGTHSH GLFKKLGIPG PTPLPFLGNI LSYHKGFCMF
61 DMECHKKYGK VWGFYDGQQP VLAITDPDMI KTVLVKECYS VFTNRRPFGP VGFMKSAISI
121 AEDEEWKRLR SLLSPTFTSG KLKEMVPIIA QYGDVLRNL RREAETGKPV TLKDVFGAYS
181 MDVITSTSFG VNIDSLNNPQ DPFVENTKKL LRFDFLDPPF LSITVFPFLI PILEVLNICV
241 FPREVTFNLR KSVKRMKESR LEDTQKHRVD FLQLMIDSON SKETESHKAL SDLELVAQSI
301 IFIFAGYETT SSVLSFIMYE LATHPDVQOK LQEEIDAVLP NKAPPTYDTV LQMEYLDMMV
361 NETLRLFPFA MRLERVCKKD VEINGMFIPK GVVVMIPSYA LHRDPKYWTE PEKFLPERFS
421 KKNKDNIDPY IYTPFGSGPR NCIGMRFALM NMKLALIRVL QNFSFKPCKE TQIPLKLSLG
481 GLLQPEKPVV LKVESRDGTV SGA*

Figure 3B


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1 ATGGATTCTC TTGTGGTCCT TGTGCTCTGT CTCTCATGTT TGCTTCTCCT TTCACTCTGG
61 AGACAGAGCT CTGGGAGAGG AAAACTCCCT CCTGGCCCCA CTCCTCTCCC AGTGATTGGA
121 AATATCCTAC AGATAGGTAT TAAGGACATC AGCAAATCCT TAACCAATCT CTCAAAGGTC
181 TATGGCCCCG TGTTCACTCT GTATTTTGGC CTGAAACCCA TAGTGGTGCT GCATGGATAT
241 GAAGCAGTGA AGGAAGCCCT GATTGATCTT GGAGAGGAGT TTTCTGGAAG AGGCATTTTC
301 CCACTGGCTG AAAGAGCTAA CAGAGGATTT GGAATTGTTT TCAGCAATGG AAAGAAATGG
361 AAGGAGATCC GGCCTTTCTC CCTCATGACG CTGCGGAATT TTGGGATGGG GAAGAGGAGC
421 ATTGAGGACC GTGTTCAAGA GGAAGCCCGC TGCCTTGTGG AGGAGTTGAG AAAAACCAAG
481 GCCTCACCCCT GTGATCCAC TTTTCATCCTG GGCTGTGCTC CCTGCAATGT GATCTGCTCC
541 ATTATTTTCC ATAAACGTTT TGATTATAAA GATCAGCAAT TTCTTAACTT AATGGAAAAG
601 TTGAATGAAA ACATCAAGAT TTTGAGCAGC CCCTGGATCC AGATCTGCAA TAATTTTCTCT
661 CCTATCATTG ATTACTTCCC GGGAACTCAC AACAAATTAC TTAAAAACGT TGCTTTTATG
721 AAAAGTTATA TTTTGGAAAA AGTAAAAGAA CACCAAGAAT CAATGGACAT GAACAACCCCT
781 CAGGACTTTA TTGATTGCTT CCTGATGAAA ATGGAGAAGG AAAAGCACAA CCAACCATCT
841 GAATTTACTA TTGAAAGCTT GGAAAAACAT GCAGTTGACT TGTTTGGAGC TGGGACAGAG
901 ACGACAAGCA CAACCCTGAG ATATGCTCTC CTTCTCCTGC TGAAGCACCC AGAGGTCACA
961 GCTAAAGTCC AGGAAGAGAT TGAACGTGTG ATTGGCAGAA ACCGGAGCCC CTGCATGCAA
1021 GACAGGAGCC ACATGCCCTA CACAGATGCT GTGGTGCACG AGGTCCAGAG ATACATTGAC
1081 CTTCTCCCCA CCAGCCTGCC CCATGCAGTG ACCTGTGACA TTAAATTCAG AAACATCTC
1141 ATTCCCAAGG GCACAACCAT ATTAATTTCC CTGACTTCTG TGCTACATGA CAACAAAGAA
1201 TTTCCCAACC CAGAGATGTT TGACCCTCAT CACTTTCTGG ATGAAGGTGG CAATTTTAAG
1261 AAAAGTAAAT ACTTCATGCC TTTCTCAGCA GGAAAACGGA TTTGTGTGGG AGAAGCCCTG
1321 GCCGGCATGG AGCTGTTTTT ATTCCTGACC TCCATTTTAC AGAACTTTAA CCTGAAATCT
1381 CTGGTTGACC CAAAGAACCT TGACACCACT CCAGTTGTCA ATGGATTTGC CTCTGTGCCG
1441 CCCTTCTACC AGCTGTGCTT CATTCCTGTC TGAAGAAGAG CAGATGGCCT GGCTGTGCT
1501 GTGCAGTCCC TGCAGCTCTC TTTCTCTGGG GGCATTATCC ATCTTTGCAC TATCTGTAAT
1561 GCCTTTTCTC ACCTGTCATC TCACATTTTC CTTCCCTGA AGATCTAGTG AACATTGAC
1621 CTCCATTACG GAGAGTTTCC TATGTTTCAC TGTGCAAATA TATCTGCTAT TCTCCATACT
1681 CTGTAACAGT TGCATTGACT GTCACATAAT GCTCATACTT ATCTAATGTA GAGTATTAAT
1741 ATGTTATTAT TAAATAGAGA AATATGATTT GTGTATTATA ATTCAAAGGC ATTTCTTTTC
1801 TGCATGATCT AAATAAAAAG CATTATTATT TGCTG

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Figure 4A

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1 MDSLVLVLC LSCLLLLSLW RQSSGRGKLP PGPTPLPVIG NILQIGIKDI SKSLTNLSKV
61 YGPVFTLYFG LKPIVVVLHGY EAVKEALIDL GEEFSGRGIF PLAERANRGF GIVFSNGKKW
121 KEIRRFSLMT LRNFGMGKRS IEDRVQEEAR CLVEELRRTK ASPCDPTFIL GCAPCNVICS
181 IIPHKRFDYK DQQFLNLMEK LNENIKILSS PWIQCINNFS PIIDYFPGTH NKLLKNVAFM
241 KSYILEKVKE HQESMDMNNP QDFIDCFLMK MEKEKHNQPS EFTIESLENT AVDLFGAGTE
301 TTSTTLRYAL LLLLKHP EVT AKVQEEIERV IGRNRSPCMQ DRSHMPYTD VVHEVQRYID
361 LLPTSLPHAV TCDIKFRNYL IPKGTTILIS LTSVLHDNKE FPNPEMFDPH HFLDEGGNFK
421 KSKYFMPFSA GKRICVGEAL AGMELFLFLT SILQNFNLKS LVDPKNLDTT PVVNGFASVP
481 PFYQLCFIPV *RRADGLAAA VQSLQLSFLW GIIHLCTICN AFSHLSSHIF PSLKI**TFD
541 LHYGEFFMFH CANISAILHT L*QLH*LSHN AH TYLM*SIN MLLL NREI*F VYNSKAF LF
601 CMI*IKSIII C

```

Figure 4B

```

1 ATGGGGCTAG AAGCACTGGT GCCCCTGGCC GTGATAGTGG CCATCTTCCT GCTCCTGGTG
61 GACCTGATGC ACCGGGCGCA ACGCTGGGCT GCACGCTACC CACCAGGCCC CCTGCCACTG
121 CCCGGGCTGG GCAACCTGCT GCATGTGGAC TTCCAGAACA CACCATACTG CTTGACACAG
181 TTGGCGCGCC GCTTCGGGGA CGTGTTCAGC CTGCAGCTGG CCTGGACGCC GGTGGTCGTG
241 CTCAATGGGC TGGCGGCCGT GCGCGAGGCG CTGGTGACCC ACGGCGAGGA CACCGCCGAC
301 CGCCCGCCTG TGCCCATCAC CCAGATCCTG GGTTCGGGC CGCGTTCCCA AGGGGTGTTT
361 CTGGCGCGCT ATGGGCCCCG GTGGCGCGAG CAGAGGCGCT TCTCCGTGTC CACCTTGCGC
421 AACTTGGGCC TGGGCAAGAA GTCGCTGGAG CAGTGGGTGA CCGAGGAGGC CGCCTGCCTT
481 TGTGCCGCCT TCGCCAACCA CTCCGGACGC CCCTTTCGCC CCAACGGTCT CTTGGACAAA
541 GCCGTGAGCA ACGTGATCGC CTCCCTCACC TGCGGGCGCC GCTTCGAGTA CGACGACCTT
601 CGCTTCCTCA GGCTGCTGGA CCTAGCTCAG GAGGGACTGA AGGAGGAGTC GGGCTTTCTG
661 CGCGAGGTGC TGAATGCTGT CCCCCTCCTC CTGCATATCC CAGCGCTGGC TGGCAAGGTC
721 CTACGCTTCC AAAAGGCTTT CCTGACCCAG CTGGATGAGC TGCTAACTGA GCACAGGATG
781 ACCTGGGACC CAGCCCAGCC CCCCCGAGC CTGACTGAGG CCTTCCTGGC AGAGATGGAG
841 AAGGCCAAGG GGAACCTGA GAGCAGTTC AATGATGAGA ACCTGCGCAT AGTGGTGGCT
901 GACCTGTTCT CTGCCGGGAT GGTGACCACC TCGACCACGC TGGCCTGGGG CCTCCTGCTC
961 ATGATCCTAC ATCCGGATGT GCAGCGCCGT GTCCAACAGG AGATCGACGA CGTGATAGGG
1021 CAGGTGCGGC GACCAGAGAT GGGTGACCAG GCTCACATGC CCTACACCAC TGCCGTGATT
1081 CATGAGGTGC AGCGCTTTGG GGACATCGTC CCCCTGGGTA TGACCCATAT GACATCCCGT
1141 GACATCGAAG TACAGGGCTT CCGCATCCCT AAGGGAACGA CACTCATCAC CAACCTGTCA
1201 TCGGTGCTGA AGGATGAGGC CGTCTGGGAG AAGCCCTTCC GCTTCCACCC CGAACACTTC
1261 CTGGATGCCC AGGGCCACTT TGTGAAGCCG GAGGCCTTCC TGCTTTCTC AGCAGGCCGC
1321 CGTGCATGCC TCGGGGAGCC CCTGGCCCGC ATGGAGCTCT TCCTCTTCTT CACCTCCCTG
1381 CTGCAGCACT TCAGCTTCTC GGTGCCCACT GGACAGCCCC GGCCAGCCA CCATGGGTGC
1441 TTTGCTTTCC TGGTGAGCCC ATCCCCCTAT GAGCTTTGTG CTGTGCCCCG CTAG

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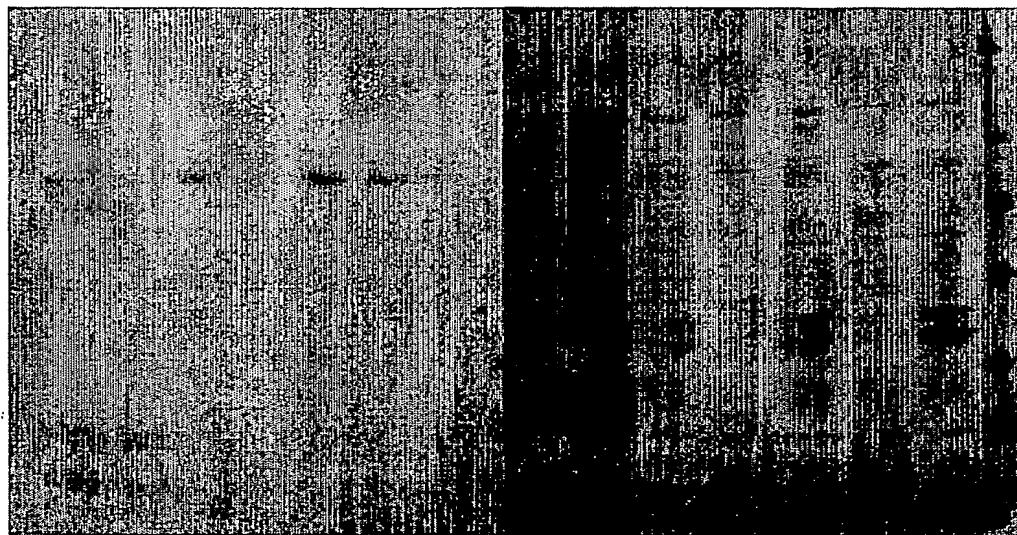
Figure 5A

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1 MGLEALVPLA VIVAIFLLLV DLMHRRQWA ARYPPLPLPL PGLGNLLHVD FQNTPYCFDQ
61 LRRRFGDVFS LQLAWTPVVV LNGLAAVREA LVTHGEDTAD RPPVPITQIL GFGPRSQGVF
121 LARYGPWRE QRRFSVSTLR NLGLGKKSLE QWVTEEAACL CAAFANHSGR PFRPNGLLDK
181 AVSNVIASLT CGRRFEYDDP RFLRLDLAQ EGLKEESGFL REVLNAVPLV LHIPALAGKV
241 LRFQKAFLTQ LDELLTEHRM TWDPAQPPRD LTEAFLAEME KAKGNPESSF NDENLRIVVA
301 DLFSAGMVTT STTLAWGLLL MILHPDVQRR VQOEIDDVIG QVRRPEMGDQ AHMPYTTAVI
361 HEVQRFGDIV FLGMTHMTSR DIEVQGFRIK KGTTLITNLS SVLKDEAVWE KPFRFHPHF
421 LDAQGHFVKP EAFLPFSAGR RACLGEPLAR MELFLFFTSL LQHFSFSVPT GQPRPSHHGV
481 FAFLVSPSPY ELCAVPR*

```

Figure 5B



Lane1 2 3 4 5 6 7 8 1 2 3 4 5 6 7 8

Figure 6

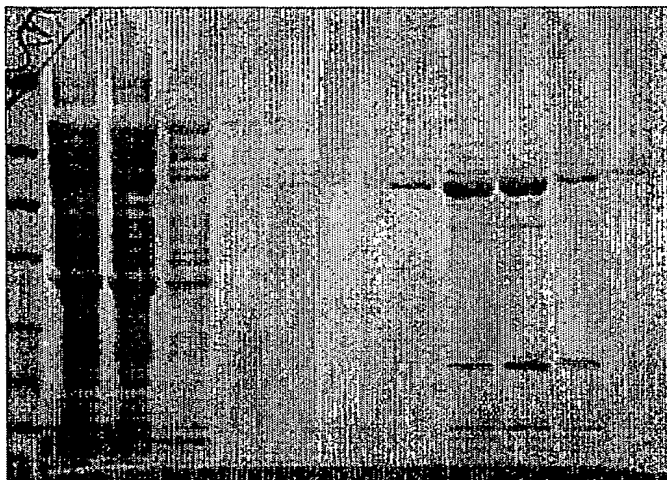
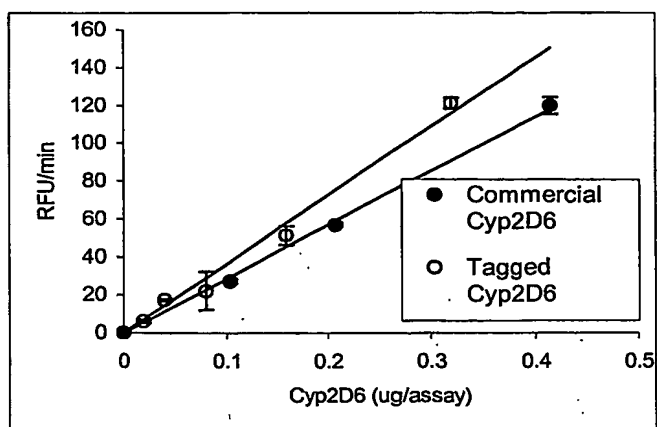
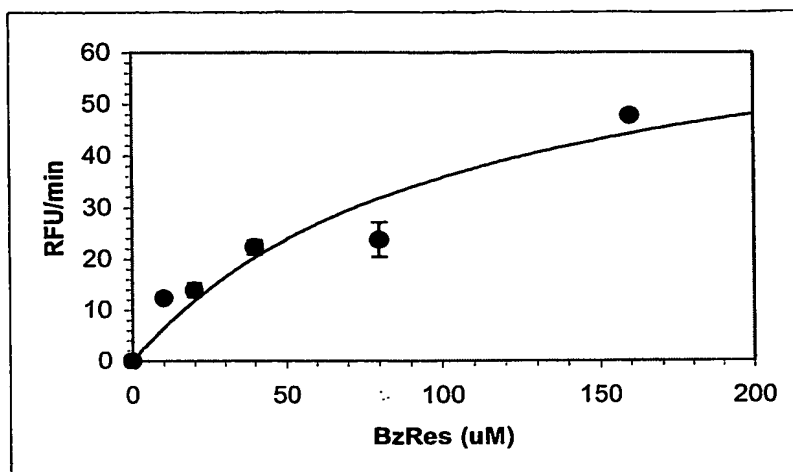


Figure 7

**Figure 8**

**Figure 9**

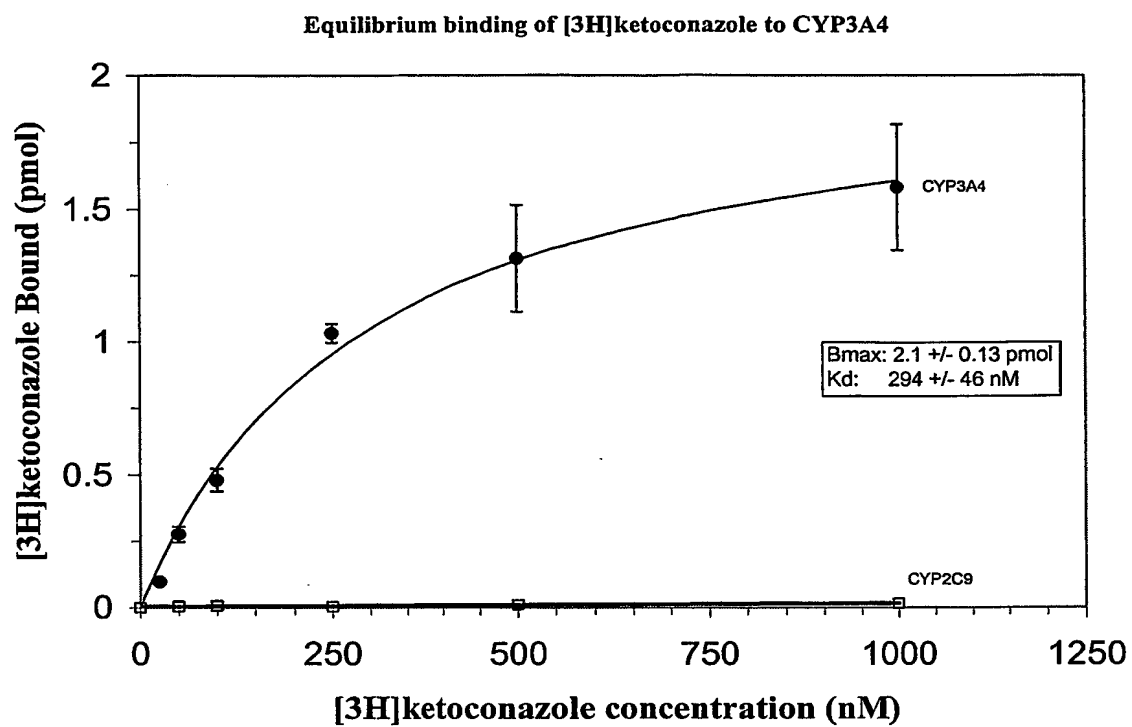
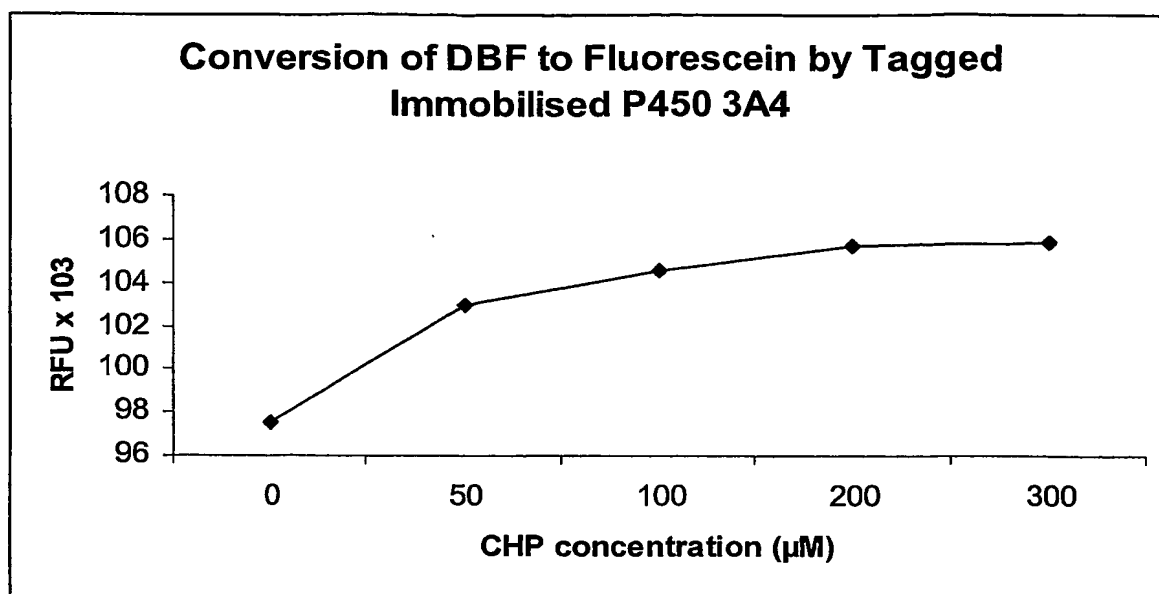


Figure 10

**Figure 11**

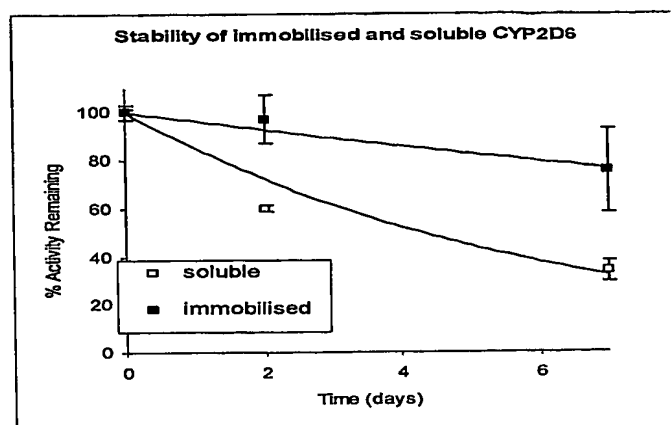


Figure 12

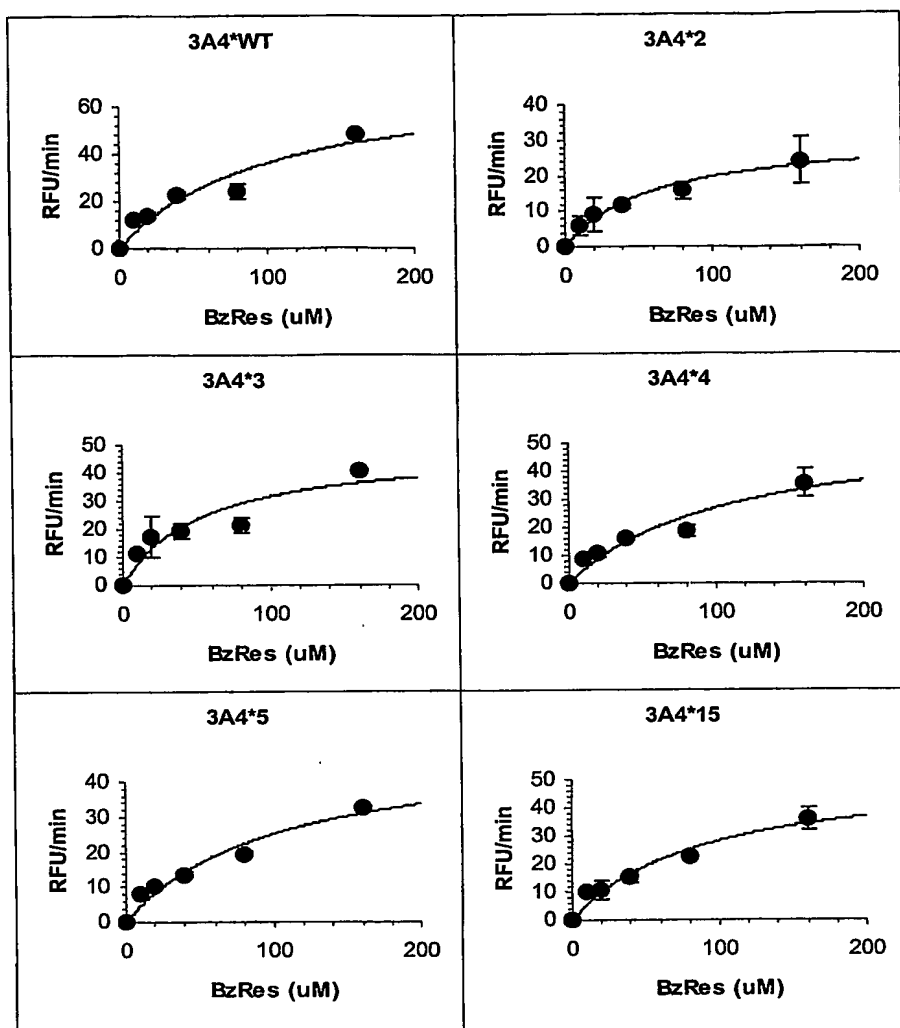


Figure 13

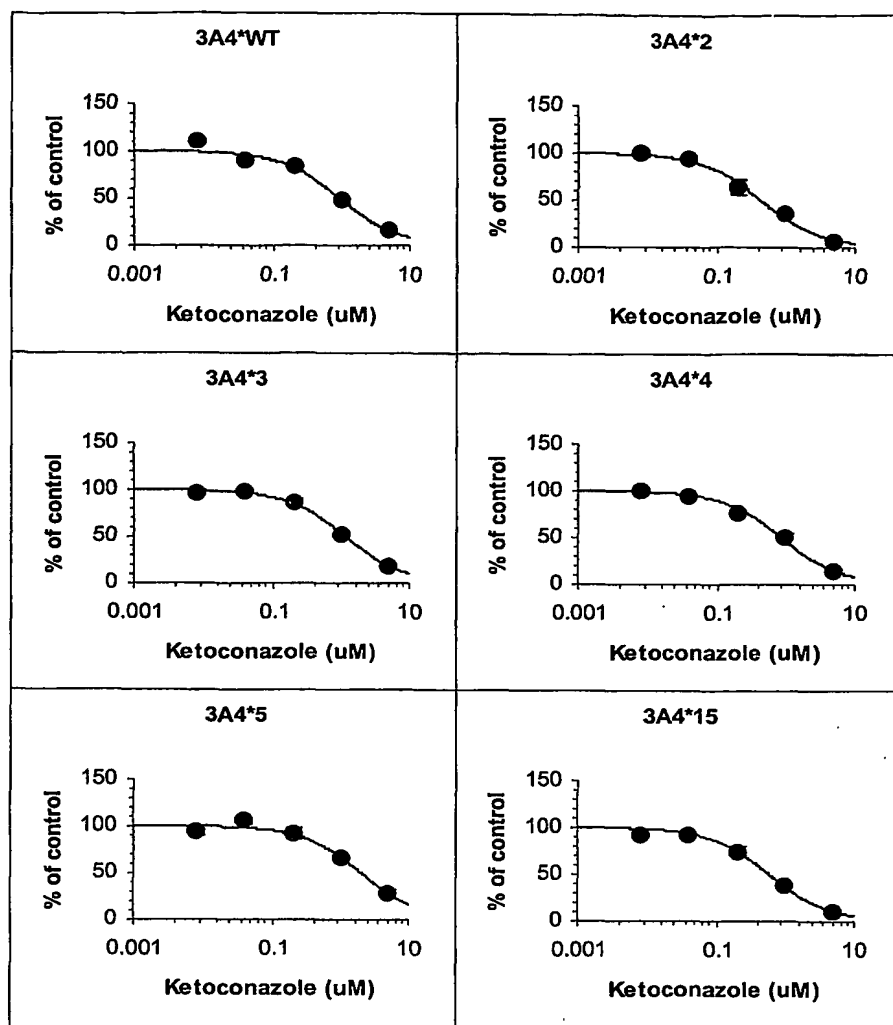


Figure 14

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